

WATER USE IN GEORGIA IN 1995

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Abstract. The Georgia Water-Use Program, a joint project between the U.S. Geological Survey (USGS), and the Georgia Department of Natural Resources, Environmental Protection Division, Georgia Geologic Survey, has collected, compiled, and disseminated data about the principal water users in Georgia since 1978. Water-use data from various Federal, State and local agencies are compiled annually and placed in a centralized data base known as the Georgia Water-Use Data System (GWUDS). GWUDS contains water-use information about public-supply, industrial, commercial, thermoelectric, and hydroelectric uses from 1980-95. The USGS also estimates water withdrawals for irrigation, domestic, and livestock uses.

The water-use estimates for every fifth year are compiled and published as part of the National Water-Use Information Program. The Georgia Water-Use Program prepared water-use estimates for 1995 for 13 categories of water users by county and hydrologic unit for both surface- and ground-water sources; water use by aquifer was estimated for ground-water sources. During 1995, total off-stream withdrawals were estimated to be 5,820 million gallons per day (Mgal/d) in Georgia. (Category estimates do not total because of independent rounding.) Of this total, about 80 percent was from surface-water sources and 20 percent was from ground-water sources.

Withdrawals for 17 thermoelectric power-generation plants totaled 3,070 Mgal/d. These plants generated an estimated 92,700 gigawatt hours of electricity. Thermoelectric power-generation plants are the largest off-stream water users and the withdrawals mostly were from surface-water sources. Public suppliers withdrew 1,150 Mgal/d in 1995; industrial and commercial users withdrew 680 Mgal/d and about 50 Mgal/d, respectively. About 720 Mgal/d were used to irrigate an estimated 1.2 million acres Statewide. Domestic withdrawals, which are assumed to be solely from ground-water sources in Georgia, was estimated at about 100 Mgal/d. Withdrawals for livestock totaled about 30 Mgal/d. Hydroelectric power generation, the only instream use compiled by the Georgia Water-Use Program, totaled about 50,900 Mgal/d in 1995 for 38 hydroelectric plants in Georgia.